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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/650,627	08/28/2003	Darcy Raymond Falconer	KAY01 P-339	7511
277	7590	07/14/2005	EXAMINER	
PRICE HENEVELD COOPER DEWITT & LITTON, LLP 695 KENMOOR, S.E. P O BOX 2567 GRAND RAPIDS, MI 49501			HEWITT, JAMES M	
			ART UNIT	PAPER NUMBER
			3679	

DATE MAILED: 07/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/650,627	<b>Applicant(s)</b> FALCONER, DARCY RAYMOND	
	<b>Examiner</b> James M. Hewitt	<b>Art Unit</b> 3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2003 and 25 April 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 1-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/28/03</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant's election of Species I (Figures 2-5) in the reply filed on 4/25/05 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 1-10 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 4/25/05.

### ***Claim Objections***

Claims 11-30 are objected to because of the following informalities:

In claim 11 line 2, it is unclear as to how the first member can be described as concentric. The term "concentric" requires a second entity relative to a first entity.

In claim 21 line 2, it is unclear as to how the first member can be described as concentric. The term "concentric" requires a second entity relative to a first entity.

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 3679

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 11-15, 17-19, 21-25 and 27-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Omiya et al (US 2002/0017785 A1).

Omiya et al disclose a multiple-pass fluid rotary union, comprising: a concentric first member (2) including a plurality of spaced longitudinally directed bores of different lengths extending from at least one end of the first member (61-64), wherein each of the longitudinally directed bores terminates at an associated radially directed bore (see Figure 1) communicating the longitudinally directed bores with an outer surface of the first member; and a second member (1) including: a first housing (17) at a first end of the second member, wherein the first housing is rotatably interconnected with the first member; an end plate (11) approximate a second end of the second member; a plurality of longitudinally adjacent segments (13, 15) positioned between the first housing and the end plate, wherein each of the segments has an outer surface, an annular inner surface, at least one circumferential groove formed into the inner surface for providing fluid communication with one of the associated radially directed bores of the first member, and wherein each of the segments includes a radially directed bore extending from each of the grooves to the outer surface of the segment; and a plurality of couplers (12, 14, 16), wherein one of the couplers is positioned between adjacent ones of the segments and between the segment adjacent the first housing and the first housing, and wherein the first member is positioned within the second member and is rotatable relative thereto.

With respect to claim 12, wherein the end plate restricts movement of the segments (via bolts) in the longitudinal direction.

With respect to claim 13, wherein a seal is positioned between the annular inner surface of each of the segments and the outer surface of the first member. Refer to Figure 1.

With respect to claim 14, wherein the seal includes a circumferential seal element in the annular inner surface of each of the segments on each side of the grooves thereof in sealing engagement with the outer surface of the first member. Refer to Figure 1.

With respect to claim 15, wherein radially directed passages are located between the grooves providing for at least one of rotary seal leakage detection, collection and drainage.

With respect to claim 17, further including: a secondary seal positioned between each of the annular segments and the first member. Refer to Figure 1.

With respect to claim 18, wherein the coupler between the adjacent segments is a torque coupling/misalignment device.

With respect to claim 19, wherein the coupler between the segment adjacent the first housing and the first housing is another torque coupling/misalignment device.

With respect to claims 21-25 and 27-29, refer to the above rejections.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 16 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Omiya et al (US 2002/0017785 A1) in view of Applicant's Admitted Prior Art.

Omiya et al fail to teach a wear resistant coating applied to the first member. In paragraph [0008] of Applicant's specification, Applicant states that the outer shaft surface of the prior art FRU may be treated with a suitable material to reduce wear or galling. In view of this teaching, it would have been obvious to one having ordinary skill in the art at the time the invention was made to coat Omiya et al's shaft with a wear resistant coating in order to reduce wear or galling.

Claims 20 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Omiya et al (US 2002/0017785 A1).

Omiya et al fail to teach a wear resistant surface treatment applied to torque coupling/misalignment devices. As it is known to apply a wear resistant surface treatment to or between moving mechanical components, it would have been obvious to one having ordinary skill in the art at the time the invention was made to apply a wear resistant surface treatment to Omiya et al's torque coupling/misalignment devices in order to reduce wear.

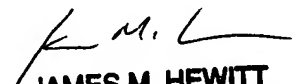
***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James M. Hewitt whose telephone number is 571-272-7084.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel Stodola can be reached on 571-272-7087. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
**JAMES M. HEWITT  
PRIMARY EXAMINER**